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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,375	04/08/2004	Kyung Ku Kim	2080-3244	1606

35884 7590 04/30/2007  
LEE, HONG, DEGERMAN, KANG & SCHMADEKA  
801 S. FIGUEROA STREET  
12TH FLOOR  
LOS ANGELES, CA 90017

EXAMINER
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FINEMAN, LEE A

ART UNIT	PAPER NUMBER
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2872

MAIL DATE	DELIVERY MODE
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04/30/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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# Office Action Summary

Application No.

10/821,375

Applicant(s)

KIM, KYUNG KU

Examiner

Lee Fineman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2007 and 27 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8 and 16-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8 and 16-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 March 2007 has been entered, in which claims 1, 5-6, 8, 21, 24, 27, and 30-31 were amended and claim 34 was added. Claims 1, 3-6, 8, and 16-34 are pending.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 30-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The newly added limitation requires "wherein the black adhesive adheres to a plurality of structures and the transparent adhesive adheres to at least two of the plurality of structures." However, another limitation in independent claim 30 requires "forming a transparent adhesive on a whole screen area of the plasma display panel." As demonstrated by the applicant's arguments (see page 7 of the remarks) of Saito which state "even if black paint 6 adheres to a "plurality of structures" (base plate 2B, Dome adhesive 4D), frame adhesive 4D (transparent adhesive) at

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most adheres to only one of these structures; namely, base plate 2B. Since frame adhesive 4D only adheres to only one of the structures at issue (base plate 2B), Saito cannot therefore teach or suggest that a "transparent adhesive adheres to at least two of the plurality of structures," as required by claim." Therefore it is unclear how the transparent adhesive can be on the whole screen area and still adhere to at least two of the plurality of structures. The dependent claims inherit the deficiencies of the claims from which they depend.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-6, 8, 16-24 and 27-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al., US 6,469,440 B1 in view of Watanabe, WO 03/040782 A1 and Kamiya et al., WO 02/066570 A1. **Note:** US 2004/0076835 A1 (Watanabe) and US 2004/0076768 A1 (Kamiya et al.) are the English equivalents of the prior art and will be referred to in the rejection.

Regarding claims 1, 3 and 34, Saito et al. disclose in fig. 1 a front filter (1) of a plasma display panel (column 1, lines 8-14), the front filter comprising: a frame adhesive (4D and 6) having a transparent adhesive (4D) formed at an active display area of the plasma display panel and a black adhesive (6, paint is an adhesive in at least so far as it adheres on it own to what it is painted on) formed at a nonactive display area surrounding the active display area (see fig. 1,

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column 10, lines 22-25 and column 16, lines 50-52). Saito et al. disclose the claimed invention except for wherein the black adhesive adheres to a plurality of structures and the transparent adhesive adheres to at least two of the plurality of structures; wherein the black adhesive is being formed by mixing the transparent adhesive with a black material; and wherein the black adhesive and the transparent adhesive are located between a same two of the plurality of structures.

Watanabe teaches a display with a front filter (see fig. 6) wherein the frame adhesive (33 and 34) includes a black frame (33) and a transparent adhesive (34) formed at an active display area of the display panel (page 7, section [0071], line 5) that adheres to at least two of a plurality of structures (32 and 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made replace the frame adhesive of Saito et al. with that of Watanabe to provide a more compact system. Kamiya et al. further teach in figs. 4 and 5 using a black adhesive frame (12<sub>B</sub>) in a display panel that adheres to a plurality of structures (20 and 11<sub>w</sub>) and wherein the black adhesive is being formed by mixing the transparent adhesive with a black material (page 1, section [0019]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the black frame portion of Saito et al. with the black adhesive frame of Kamiya et al. to provide an effective screen frame while also providing better adhesion between layers (Kamiya et al., page 2, section [0021], lines 8-12). Therefore the black adhesive also adheres to a plurality of structures (2B and 5B); and the black adhesive and the transparent adhesive are located between a same two of the plurality of structures (2B and 5B).

Regarding claims 5-6, 16-18 and 20, Saito et al. in view of Watanabe and Kamiya et al. as set forth above further disclose wherein the front filter is attached to an upper glass substrate of a plasma display panel (column 5, lines 34-51), having a base film (10, column 9, line 64-

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column 10, line 7), a near infrared shielding layer (5A, 5B), an electromagnetic shielding layer (3), and an antireflection layer (8), and comprises a plurality of adhesives (the black and transparent adhesives as set forth above and 4A, 4B, 4C) formed on the upper glass substrate (column 5, lines 34-51); wherein the frame adhesive is formed on the electromagnetic shielding layer (see fig. 1); and wherein a transparent adhesive (see 34, Watanabe) is formed at an area that is overlapped with the active display area (fig. 1).

Regarding claim 8, Saito et al. further disclose a fabrication method of a front filter of a plasma display panel comprising: preparing a base film (10, column 9, line 64-column 10, line 7); forming a black adhesive (6) at a nonactive display area of the plasma display panel (see fig. 1, column 10, lines 22-25 and column 16, lines 50-52), wherein the nonactive display area is positioned on the base film (fig. 1); and forming a transparent adhesive (4A) at an active display area of the plasma display panel, wherein the active display area is positioned on the base film (fig. 1). Saito et al. disclose the claimed invention except for wherein the black adhesive adheres to a plurality of structures and the transparent adhesive adheres to at least two of the plurality of structures. Watanabe teaches a forming a display with a front filter (see fig. 6) wherein the frame adhesive (33 and 34) includes a black frame (33) and a transparent adhesive (34) formed at an active display area of the display panel (page 7, section [0071], line 5) that adheres to at least two of a plurality of structures (32 and 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made replace the frame adhesive of Saito et al. with that of Watanabe to provide a more compact system. Kamiya et al. further teach in figs. 4 and 5 using a black adhesive frame (12<sub>B</sub>) in a display panel that adheres to a plurality of structures (20 and 11<sub>w</sub>). It would have been obvious to one of ordinary skill in the art at the time the invention was

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made to replace the black adhesive frame of Saito et al. with the black adhesive frame of Kamiya et al. to provide an effective screen frame while also providing better adhesion between layers (Kamiya et al., page 2, section [0021], lines 8-12). Therefore the formed black adhesive also adheres to a plurality of structures (2B and 5B).

Regarding claims 24 and 30, Saito et al. further disclose a fabrication method of a front filter of a plasma display panel, the method comprising: preparing a base film (5B, column 16, lines 52-55); forming a transparent adhesive (4D) at an active display area of the plasma display panel (fig. 1), wherein the active display area is positioned on the base film (fig. 1); and forming a black adhesive (6) at a nonactive display area of the plasma display panel after forming the transparent adhesive (column 16, lines 50-55, in so far as the adhesive films are "first prepared"), wherein the nonactive display area is positioned on the base film (fig. 1). Saito et al. disclose the claimed invention except for wherein the black adhesive adheres to a plurality of structures and the transparent adhesive adheres to at least two of the plurality of structures. Watanabe teaches a forming a display with a front filter (see fig. 6) wherein the frame adhesive (33 and 34) includes a black frame (33) and a transparent adhesive (34) formed at an active display area of the display panel (page 7, section [0071], line 5) that adheres to at least two of a plurality of structures (32 and 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made replace the frame adhesive of Saito et al. with that of Watanabe to provide a more compact system. Kamiya et al. further teach in figs. 4 and 5 using a black adhesive frame (12<sub>B</sub>) in a display panel that adheres to a plurality of structures (20 and 11<sub>w</sub>). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the black adhesive frame of Saito et al. with the black adhesive frame of Kamiya et al. to provide an

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effective screen frame while also providing better adhesion between layers (Kamiya et al., page 2, section [0021], lines 8-12). Therefore the formed black adhesive also adheres to a plurality of structures (2B and 5B). In as much as claim 30 is able to be understood in light of the 35 U.S.C 112 rejection made above the rejection applies.

Regarding claims 21, 27 and 31, Saito et al. further disclose wherein the nonactive display area is positioned on an outer area of the active display area (fig. 1). In as much as claim 31 is able to be understood in light of the 35 U.S.C 112 rejection made above the rejection applies.

Regarding claims 22, 23, 28, 29, 32 and 33, Saito et al. further disclose wherein the black and transparent adhesives are formed by one of a printing method, a laminating method and a pressing method (pressing method, see column 16, lines 48-61). In as much as claims 32 and 33 are able to be understood in light of the 35 U.S.C 112 rejection made above the rejection applies.

6. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. in view of Watanabe and Kamiya et al. as applied to claim 24 above and further in view of Shimamura et al., US 6,808,773

Saito et al. in view of Watanabe and Kamiya et al. as applied to claim 24 above disclose the claimed invention except for wherein the steps for fabricating the transparent and black adhesive include using screen masks. Shimamura et al. teach that screen masks are used to form very accurate, specific patterns in fabricating elements of front filters for plasma display panels as demonstrated by using a screen mask to form the copper foil of the electromagnetic shielding layer shield (see column 7, lines 3-8). It would have been obvious to one of ordinary skill in the



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art at the time the invention was made to use screen masks to form the transparent and black adhesive to provide very accurate, specific pattern shapes.

***Response to Arguments***

7. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

8. It is noted by the Examiner that the claim objections made in the previous Office Action have been withdrawn due to amendment by the Applicant.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LAF

27 April 2007

  
MARK A. ROBINSON  
PRIMARY EXAMINER